WHAT IS CLAIMED IS:

1. Heat exchanger comprising:

- a bearing structure (2), which defines at least a main chamber (3);
- a predetermined number of tubes (4), which cross said main chamber (3);
- at least a secondary chamber (5), which is in fluid connection with said tubes (4) and fluid proof with respect to the main chamber (3);
- at least a tube plate (6), which shows the adequate seats (7) for housing said tubes (4), wherein said tube plate (6) is interposed between the main chamber (3) and the secondary chamber (5);
- sealing means (8) interposed at least between the main chamber (3) and the secondary chamber (5), to avoid fluid flow-by, characterised in that it further comprises:
- a containing plate (9), which shows a respective holding seat (10) for each tube (4), wherein said holding seat (10) is crossed by a tube (4) and houses the sealing means (8); and
- a clamping plate (11), which equally shows respective through seats (12), in order to put the secondary chamber (5) in fluid connection with the tubes (4), wherein said containing plate (9) is interposed between the tube plate (6) and the clamping plate (11).

2. Heat exchanger according to claim 1, wherein the sealing means (8) comprise at least a first and a second sealing element (13a, 13b) for each tube (4), wherein the said sealing elements (13a, 13b) surround the tube (4) and are housed in the holding seat (10) defined by the containing plate (9).

3. Heat exchanger according to claim 2, wherein the sealing means (8) comprise a spacing bush (14), which is arranged around the tube (4) and interposed b tween the

sealing means (13a, 13b).

4. H at exchanger according to claim 2, wherein the sealing means (8) comprise a bush pressing element (15) arranged around the tube (4) and acting on the second sealing means (13b).

5. Heat exchanger according to claim 4, wherein the bush pressing element (15) shows a face (16) facing to and abutting on the clamping plate (11), wherein said face shows a predetermined number of sealing riflings (17).

6. Heat exchanger according to claim 1, wherein each holding seat (10) is delimited in radial direction by the containing plate (9), externally, and by the surface of the tube (4), internally, and it is axially delimited, on the one side, by the tube plate (6) and, on the other side, by the clamping plate (11).

7. Heat exchanger according to claim 1, wherein the clamping plate (11) abuts on the containing plate (9).

8. Heat exchanger according to claim 1, wherein containing plate (9) abuts on the tube plate (6).

9. Heat exchanger according to claim 1, further comprising a sealing gasket (18), which is interposed between the containing plate (9) and the tube plate (6).

10. Heat exchanger according to claim 1, further comprising a sealing gasket (19), which is interposed between the clamping plate (11) and the containing plate (9).

11. Heat exchanger according to claim 1, wherein said clamping plate (11), in correspondence to an outer surface thereof, shows a seat (20) which is fit for housing an adequate gasket.

12. Heat exchanger according to claim 1 fit for housing and engaging with a check chamber, in correspondence to an outer surface of the clamping plate (11).

13. Heat exchanger according to claims 3 and 4, wherein

the holding seat (10) shows an axial length (L) which is smaller or equal to the sum of the corresponding lengths of sealing elements (13a, 13b), bush (14) and bush pressing element (15).

14. Heat exchanger according to claim 2, wherein the clamping packing of tube plate (6), containing plate (9) and clamping plate (11) implies deformation of at least the said sealing elements (13a, 13b), due to compression.

15. Sealing device fit for employment in tubes made of non-solderable materials, which are used for manufacturing tube bundle heat exchangers, comprising:

- at least a tube plate (6);
- at least a containing plate (9), fit for abutting on the tube plate (6);
- at least a clamping plate (11), fit for abutting on the containing plate (9); and
- sealing means (8) interposed between the tube plate (6) and the clamping plate (11), to avoid fluid flow-by, wherein said containing plate shows a respective holding seat (10), which houses the said sealing means (8).